# **SECTION 5**

# **NATALITY**

#### **Birth Rates**

Birth rates for California women are shown in Table 5.1 for the years 1985, and 1990 through 1993, stratified by race/ethnicity and age. Overall, the birth rate (number of births per 1,000 women of the specified age group) increased from 74.6 to 84.6 between 1985 to 1990, then decreased to 79.4 by 1993. For females younger than age 15, the birth rate was lower than that of women between ages 15 and 44 years. Nevertheless, it steadily increased from 1.0 in 1985 to 1.5 in 1993. For females aged 15-19 years, the birth rate increased from 52.5 in 1985 to 72.2 in 1991, then decreased to 70.6. Birth rates for females ages 40-44 steadily increased, from 6.1 in 1985 to 9.7 in 1993.

Birth rates differed substantially among race/ethnic groups. In 1993, Hispanic females had the highest birth rate (127.3 per 1,000 women of child bearing age), followed by African American women (79.4 per 1,000), Asian/Other women (70.9 per 1,000), and white women (55.5 per 1,000). This high birth rate for Hispanic females contributes significantly to the overall increase in the proportion of the population that is Hispanic in California.

The birth rate decreased between 1992 and 1993 for white, African American and Asian/Other females, but it increased among Hispanic females during this period. Among young women less than 15 years old, birth rates for young African American females (2.9 per 1,000) and Hispanic females (2.7) were higher than corresponding birth rates for Asian/Other females (0.9) and white females (0.4) in that same age group. This was the only age group in which the Hispanic birth rate was not the highest. Older mothers were more apt to be Asian/Other or Hispanic and less likely to be African American or white.

For this section on natality, data from the birth certificate are used. In California, data on race/ethnicity are collected for 21 specific subgroups. Along with the major four groups (white, African American, Hispanic, and Asian/Other) information for four additional subgroups within the Hispanics, 10 additional subgroups within the Asians and four additional subgroups within the Pacific Islanders are also collected. Because the natality data are based on the number of live births rather than the population, as the mortality rates are calculated, we have chosen to present natality data for all of the subgroups that are included on the birth certificate. Even though these same 21 race/ethnic groups are also collected on the death certificate, no population estimates for these groups are available and therefore, rates cannot be calculated.

## **Low Birthweight Infants**

Birth of an infant weighing less than 2500 grams (i.e., of a low birthweight infant) is an indicator of poor maternal nutrition and poor access to medical care and has been associated with poorer birth outcomes. The percent of infants born in California weighing less than 2500 grams is shown in Table 5.2. For all infants born in 1994 in California, 6.2 percent were low birthweight.

The percent of low birthweight infants varied among race/ethnic groups. African American mothers had the highest percent of low birthweight babies (12.6 percent), followed by

Cambodian mothers (9.7 percent) and Asian Indian mothers (9.1). White and Hispanic mothers had a lower percent of low birthweight babies (5.5 percent for each). Among the Hispanic subpopulations, Puerto Rican mothers had the highest percent of low birthweight infants (7.5. percent). Among Asian/Pacific Islander mothers there was a wide range in the percent of low birthweight infants, from 3.8 percent among Samoan mothers to a high of 9.7 percent of births among Cambodian mothers.

# Age of Mother

In Table 5.3 are shown the percent of births to mothers under age 18, ages 18 to 39, and ages 40 and over. The two age groups at greatest risk for not having healthy newborns are the very young mothers (age less than 18) and the older mothers (age 40 and over). Teenage mothers have a higher risk of negative birth outcomes because they tend to have low income (2) and the physiological characteristics of young women (3). Births to mothers who were younger than age 18 comprised 4.9 percent of all live births in California in 1994, a total of 28,065 births.

There was a wide variation among race/ethnic groups in the percent of births to mothers under age 18. The percent of births to mothers less than 18 years of age was 8.1 among Native Americans, 7.8 among African Americans and 2.7 among whites.

Among Hispanic females, 6.7 percent of the births were to females less than 18 years of age. Two of the four sub-populations had a higher percent, Puerto Rican and Mexican mothers at 7.5 and 7.2 percent respectively; and two groups had lower percentages, "Other Hispanic" mothers at 5.0 percent and Cuban mothers at 3.2 percent.

Among Asians, there was a wide range in the percent of births to teenage mothers. The highest was for Laotian mothers (9.5 percent) followed by Thai mothers (8.0 percent) while the lowest were among Chinese and Korean mothers (3.0 percent each). The percent of births to teenage mothers among Pacific Islanders varied from a high of 6.7 for Guamanians to a low of 2.4 for Other Pacific Islander mothers. Over all, 3.6 percent of the births to Pacific Islanders were to mothers less than age 18 years.

#### **Education of Mother**

The educational level of women giving birth in 1994 is shown in Table 5.4. Over one-third of the mothers had less than a high school education. This percent varied from a high of 62.8 for Cambodian and Laotian mothers to a low of 2.0 percent for Japanese mothers.

Of the white mothers, 11.1 percent did not have a high school education, while 56.1 percent were college graduates. For African American mothers, the percent with less than a high school education was higher than for whites, 20.6 percent, and over one-third were college graduates (36.9 percent). Data for Native American mothers showed that 32.0 percent had less than a high school education and approximately one-fourth (26.3 percent) had a college education.

Hispanics, as a group, had the highest percent of mothers without a high school education, (58.7 percent) and they also had the smallest percent of mothers with a college education (14.7 percent). Within the Hispanic population, Mexican mothers had an even higher percent with less than a high school education (61.0 percent) and a smaller percent (13.0 percent) with college degrees. Mothers identified as Other Hispanic had the second-highest percent with less than a

high school education (47.8 percent) and second-lowest percent with a college degree (22.7 percent).

In the Asian population as a whole, 20.0 percent of mothers had less than a high school education and, in contrast, over half (56.7 percent) of the Asian mothers had a college degree. As with the other indicators examined in this report, the widest variation among sub-populations is among the Asians. The percent of mothers with less than a high school education ranged from 2.0 percent for Japanese mothers to 62.8 percent for Cambodian and Laotian mothers. There were more Asian mothers with a college degree than for other race/ethnic groups: this percentage was highest among Japanese mothers (80.3 percent), followed by Filipino mothers (70.7 percent), Korean mothers (69.9 percent), Asian Indian mothers (69.0 percent) and Chinese mothers (63.9 percent).

Pacific Islander mothers had the second lowest percent of births to mothers without a high school education (17.0 percent). Within the Pacific Islander group, the percent of births to mothers with less than a high school education were fairly similar: 13.1 percent of Hawaiian, 15.0 percent of Samoans, 18.5 percent of Other Islanders, and 23.8 percent of Guamanians. Hawaiian mothers had the largest percent with college degrees (42.6 percent).

#### **Prenatal Care**

Early initiation of prenatal care (i.e., care that begins in the first trimester of pregnancy) permits early identification of risks and appropriate interventions. Data on prenatal care are shown in Table 5.5.

In 1994, slightly more than three-fourths of all women who gave birth in California began prenatal care in the first trimester (77.1 percent). There was wide variation among race/ethnic groups in the percent who received early prenatal care. The groups with the highest and the lowest percentages not receiving early care were both within the Asian/Pacific Islander subgroups: Japanese women had the highest percent receiving early care (90 percent) while the lowest percent was for Samoan women (51.5 percent).

Of the six major race/ethnic groups, Native American and Hispanic women had the lowest percent receiving early care, 66.2 and 70.5 respectively. African American women had 74.6 percent receiving early care, Asians 81.9 and whites, 85.2.

Hispanic women had the smallest variation among the subgroups, with Cuban women having the highest percent (88.1) and Mexican women with the lowest (69.6). The greatest variation was among Asian women: Japanese women had the highest percent (90.0) and Laotian women had the lowest (65.3). The Pacific Islander population had the lowest percentages of women receiving early care, varying from a high of 74.0 percent for Hawaiian women to a low of 51.5 for Samoan women.

#### **Source of Payment for Child Birth**

Data displaying the major source of funding for delivery are shown in Table 5.6. The largest single source of payment was Medi-Cal, accounting for 48.2 percent of all deliveries. Health Maintenance Organizations, such as Kaiser, were second, accounting for 26.2 percent, followed by private insurance, 19.8 percent.

Payment for delivery varied considerably among the race/ethnic groups. Hispanic women had 68.3 percent of births paid for by Medi-Cal. Within the Hispanic group, Mexican mothers had an almost identical percent paid for by Medi-Cal (69.4 percent). African American mothers had over half of their births funded by Medi-Cal (57.2 percent), while slightly less than half of the Pacific Islander women had births paid for by Medi-Cal (46.4 percent). Among white mothers, one fourth of births were paid for by Medi-Cal. The group with the highest percent of births paid for by Medi-Cal was Laotian women, with 76.9 percent. The group with the second-largest percent of births funded by Medi-Cal was Cambodian mothers (75.5 percent). Japanese mothers were least likely to have births paid by Medi-Cal (6.8 percent of births) and were most likely to have births paid by private insurance or HMO (84.4 percent of all births).

Self-pay constituted a small portion of all funding sources for births (2.8 percent). The two groups of mothers with the largest percent in this category were the Chinese (10.0 percent) and Korean (11.5 percent). "No Charge" deliveries accounted for less than one percent.

#### **Cesarean Births**

Table 5.7 shows data for 1994 for cesarean births in California. Cesarean rates have been decreasing the past few years, after climbing to a high of 23.5 percent in 1987. By 1994, the cesarean birth rate had decreased to 20.8. This rate varied among race/ethnic groups, however the variation among cesarean birth rates is less than the variation among other birth indicators shown in this report. The greatest percent of cesarean births was for mothers from Thailand (26.3) followed by Cuban mothers (25.1).

White, African American and Native American mothers had nearly the same percent of cesarean births (22.1, 23.3, and 22.1 respectively). For all Hispanic mothers, the cesarean birth rate was 19.6. Among the Hispanic subgroups, the cesarean rate varied from a high of 25.1 percent for Cuban mothers to a low of 19.5 percent for Mexican mothers.

Asian mothers showed the greatest variation among subgroups, from a high of 26.3 for Thai mothers to a low of 8.0 for Laotian mothers. Among Pacific Islander mothers, Hawaiian and Guamanian mothers had 20 percent of their births by cesarean section and Samoan and Other Islanders each had 17 percent.

## Maternal, Fetal, and Infant Mortality

Maternal mortality (the number of deaths of women due to complications of pregnancy, childbirth, and during the first six weeks following childbirth) has declined dramatically during the past fifty years in California. The maternal mortality rate in 1940 was 28.4 per 10,000 live births and fell in subsequent years to 16.3 per 10,000 live births in 1955, to 2.9 in 1960, to 2.1 in 1970, and to 1.1 in 1980. Between 1980 and 1993 it varied between 1.1 and 0.6 per 10,000 live births and was 1.0 in 1994. (Data not shown.)

Fetal mortality (the number of deaths of the unborn at 20 or more weeks of gestation) were 20.4 per 1,000 live births in 1940. The number fell to 12.9 per 1,000 live births in 1960, 8.9 in 1980, and 6.5 in 1990. In 1994, there were 5.6 fetal deaths per 1,000 live births. (Data not shown.)

Infant mortality (deaths of children under one year of age) also fell during this period, from 39.6 per 1,000 population in 1940, to 24.9 in 1950, 23.3 in 1960, 17.2 in 1970, 11.1 in 1980, and 7.9

per 1,000 population in 1990. In 1994, there were 7.0 infant deaths per 1,000 population. (Data not shown.)

# **Summary of Birth Data**

The birth rate in California increased between 1985 and 1993 for Hispanic and African American women, but declined for Asian/Other and white women. The 1993 birth rate of Hispanic women was more than double that of white women and about two thirds higher than that of African American and Asian/Other women. About five percent of all births were to teens under age 18 years. This percent reached 7 to 9 percent among African Americans, Native Americans, some Hispanic groups (Puerto Ricans and Mexicans) and among some Southeast Asian Groups (Thai and Laotians).

Among women who gave birth in California in 1994, about 35 percent had less than a high school education. However, this percent was even higher among Hispanics and Southeast Asian women.

Among women of childbearing age in California, about 30 percent had incomes in the poverty range (under 200 percent of FPL). However, approximately 50 percent of births in California were paid for through the public sector in 1993. This percentage was even higher among Cambodian and Laotian, Hispanic, Native American, and African American women. It was lower among Japanese, white, Chinese, Filipino, and Asian Indian women.

Overall, about 20 percent of pregnant women in California started prenatal care late (i.e., after the first trimester of pregnancy). This percentage was higher among Laotians, Cambodians, Samoans, Guamanians, and African Americans.

The percent of babies born with low birth weight was twice as high among African American women than among any of the other major race/ethnic groups. However, women of several subgroups also had elevated risk of low birthweight babies, including Cambodians, Laotians, and Asian Indians.

Between 1940 and 1994, the maternal death rate fell from 28.4 to 7.0 per 10,000 live births, the fetal death rate fell from 20.4 to 5.8 per 1,000 live births, and the infant mortality rate fell from 39.6 to 7.0 per 1,000 population.